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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

09/577,034

05/23/2000

James K. Guenter

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09/24/2002

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EXAMINER

VY, HUNG T

ART UNIT

PAPER NUMBER

2828

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,034

Applicant(s)

GUENTER ET AL.

Examiner

Hung T Vy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/27/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


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Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. In response to the communications dated 05/23/2000 through to 08/27/2002, claims 1-20 are pending in this application as a result of the addition of claims 21-22.

Acknowledges

2. Receipt is acknowledged of the following items from the Applicant.

Information Disclosure Statement (IDS) filed on 05/23/2001 and made of record as Paper No. 3. The references cited on the PTOL 1449 form have been considered.

Specification

4. The specification has been checked to the extent necessary to determine the presence of possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1 - 14 rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "a light output that has one and/or both of at least two polarization states" renders the claim indefinite because it is unclear how the single light output can have at least two-polarization state. The phrase "a polarization medium positioned in proximal relation to the laser source element for selecting and attenuating" is vague and indefinite. It is not clear how the polarization medium is used to select and attenuate. The claim recites a polarization controlled optional energy source without the recitation of any structure elements for polarization control.

Claims 2-14 depend from rejected claim 1 thereby render these dependent claims indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 1,2,4-7,10-12, and15-19 are rejected under 35 U. S. C. § 102 (e) as being anticipated by U.S. patent No. Davis et al, U.S. No. 6,069,905.

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Regarding to claims 1, 5, 10, and 21 Davis et al. disclose a polarization controlled optical energy source, comprising:

A laser source (10) that produces a light output that has one and/or both of at least two polarization states (see Fig 3); and polarization medium (39) positioned in proximal relation to the laser source element (See column 5, line 33-37). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states.

Regarding claims 2,6 and 7, Davis et al, disclose the source, wherein said laser source element is disposed within a component package having an emission aperture formed therein. (See column 3, lines 13, and column 3, lines 2 and fig 3).

Regarding to claim 4, Davis et al, disclose the source, wherein said laser source element (10) has multiple distinct polarization states oriented with respect to one another at angular intervals. (See fig 13).

Regarding to claim 11, Davis et al. disclose the source, wherein said polarization medium 39 is affixed to the component package spanning the emission aperture. See Fig 7.

Regarding to claim 12, Davis et al. disclose the source, wherein said polarization medium (39) is disposed within the component package between the vertical cavity surface emitting laser (10) and the emission aperture. (See column 5, line 33 –37 and fig 7).

With respect to claims 15-19 and 22, the methods for VCSEL polarization control are considered as product by process steps.

Claim Rejections - 35 U.S.C. § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 20 rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. patent No. Davis et al, U.S. No. 6,069,905, in view of Jewell et al, U.S. Patent No. 5,331,654.

Regarding claims 3, 8, 9, 13, 14, 20, Davis et al. disclose a polarization controlled optical energy source with a package base, a vertical cavity surface emitting laser device, package cover, and polarization medium but Davis et al. do not disclose polarization medium (39) provides linear polarization, laser source element has two distinct polarization states that are normal to one another, polarization medium is formed from a sheet polarization material. However, Jewell et al. disclose polarization medium 68 provides linear polarization (See column 7, line 19-27), the source, wherein said polarization medium provides linear polarization (See column 7, line 19-27), laser

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source element has two distinct polarization states that are normal to one another (See column 4, line 33 – 36 and Fig 10), and polarization medium is formed from a sheet polarization material. See column 4, line 39 – 55.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Davis et al. to have linear polarization and a sheet polarization material that of Jewell et al., because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of, but further increasing the performance of, the invention of Jewell et al.

Citation of Pertinent References

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Park discloses Optical Head Having Two Vertical Cavity Surface Emitting Lasers With Different Wavelengths, U.S. Patent No. 5,986,998.

The patent to Baldwin et al. disclose integrated controlled intensity laser-based light source, U.S. Patent No. 5,761,229.

The patent to Wu et al. disclose Method, article of Manufacture, And Optical, Package for Eliminating Tilt Angle Between a Header and an Optical Emitter Mounted Thereon, U.S. Patent No. 6,031,856.

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The patent to Kobayashi discloses Optical Pickup Device, U.S. Patent No. 6,434,105.

The patent to Hayashi et al. disclose two Plate-like Beam Splitting Device, U.S. Patent No. 5,629,919.

Conclusion

12. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

13. Any inquiry concerning this communication or earlier communications from the examiner, should be directed to Hung Vy whose telephone number is (703) 605-0759. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


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Hung T. Vy

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